

FORM PTO-1390 (REV. 11-2000)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTORNEY'S DOCKET NUMBER Beiersdorf 713-KGB
TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. 371			U.S. APPLICATION NO. (if known, see 37 CFR 1.5) <b>09/763106</b>
INTERNATIONAL APPLICATION NO. PCT/EP99/06113	INTERNATIONAL FILING DATE 20 August 1999 (20.08.99)	PRIORITY DATE CLAIMED 21 August 1998 (21.08.98)	
TITLE OF INVENTION SEE APPENDIX			
APPLICANT(S) FOR DO/EO/US Martin SUGAR and Robert SCHMUCKER			
Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:			
<ol style="list-style-type: none"> <li>1. <input checked="" type="checkbox"/> This is a <b>FIRST</b> submission of items concerning a filing under 35 U.S.C. 371.</li> <li>2. <input type="checkbox"/> This is a <b>SECOND</b> or <b>SUBSEQUENT</b> submission of items concerning a filing under 35 U.S.C. 371.</li> <li>3. <input checked="" type="checkbox"/> This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.</li> <li>4. <input type="checkbox"/> The US has been elected by the expiration of 19 months from the priority date (Article 31).</li> <li>5. <input checked="" type="checkbox"/> A copy of the International Application as filed (35 U.S.C. 371(c)(2)) <ol style="list-style-type: none"> <li>a. <input type="checkbox"/> is attached hereto (required only if not communicated by the International Bureau).</li> <li>b. <input checked="" type="checkbox"/> has been communicated by the International Bureau.</li> <li>c. <input type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US).</li> </ol> </li> <li>6. <input checked="" type="checkbox"/> An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)). <ol style="list-style-type: none"> <li>a. <input checked="" type="checkbox"/> is attached hereto.</li> <li>b. <input type="checkbox"/> has been previously submitted under 35 U.S.C. 154(d)(4).</li> </ol> </li> <li>7. <input type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)) <ol style="list-style-type: none"> <li>a. <input type="checkbox"/> are attached hereto (required only if not communicated by the International Bureau).</li> <li>b. <input type="checkbox"/> have been communicated by the International Bureau.</li> <li>c. <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired.</li> <li>d. <input type="checkbox"/> have not been made and will not be made.</li> </ol> </li> <li>8. <input type="checkbox"/> An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371 (c)(3)).</li> <li>9. <input checked="" type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).</li> <li>10. <input type="checkbox"/> An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).</li> </ol>			
Items 11 to 20 below concern document(s) or information included:			
<ol style="list-style-type: none"> <li>11. <input checked="" type="checkbox"/> An Information Disclosure Statement under 37 CFR 1.97 and 1.98.</li> <li>12. <input checked="" type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.</li> <li>13. <input checked="" type="checkbox"/> A <b>FIRST</b> preliminary amendment.</li> <li>14. <input type="checkbox"/> A <b>SECOND</b> or <b>SUBSEQUENT</b> preliminary amendment.</li> <li>15. <input type="checkbox"/> A substitute specification.</li> <li>16. <input type="checkbox"/> A change of power of attorney and/or address letter.</li> <li>17. <input type="checkbox"/> A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 35 U.S.C. 1.821 - 1.825.</li> <li>18. <input type="checkbox"/> A second copy of the published international application under 35 U.S.C. 154(d)(4).</li> <li>19. <input type="checkbox"/> A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).</li> <li>20. <input type="checkbox"/> Other items or information:</li> </ol>			

U.S. APPLICATION NO. <b>09/763106</b> INTERNATIONAL APPLICATION NO. PCT/EP99/06113		ATTORNEY'S DOCKET NUMBER Beiersdorf 713-KGB	
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21. <input checked="" type="checkbox"/> The following fees are submitted: <b>BASIC NATIONAL FEE (37 CFR 1.492 (a) (1) - (5)):</b> Neither international preliminary examination fee (37 CFR 1.482) nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO and International Search Report not prepared by the EPO or JPO. .... <b>\$1000.00</b>  International preliminary examination fee (37 CFR 1.482) not paid to USPTO but International Search Report prepared by the EPO or JPO ..... <b>\$860.00</b>  International preliminary examination fee (37 CFR 1.482) not paid to USPTO but international search fee (37 CFR 1.445(a)(2)) paid to USPTO ..... <b>\$710.00</b>  International preliminary examination fee (37 CFR 1.482) paid to USPTO but all claims did not satisfy provisions of PCT Article 33(1)-(4) ..... <b>\$690.00</b>  International preliminary examination fee (37 CFR 1.482) paid to USPTO and all claims satisfied provisions of PCT Article 33(1)-(4) ..... <b>\$100.00</b>  <b>ENTER APPROPRIATE BASIC FEE AMOUNT =</b>			<b>CALCULATIONS PTO USE ONLY</b>          <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: right;">\$ 860.00</td> <td style="width: 50%;"></td> </tr> <tr> <td style="text-align: right;">\$</td> <td></td> </tr> </table>		\$ 860.00		\$	
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Surcharge of \$130.00 for furnishing the oath or declaration later than <input type="checkbox"/> 20 <input type="checkbox"/> 30 months from the earliest claimed priority date (37 CFR 1.492(e)).			<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: right;">\$</td> <td style="width: 50%;"></td> </tr> <tr> <td style="text-align: right;">\$</td> <td></td> </tr> </table>		\$		\$	
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CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE					
Total claims	6 - 20 =	0	x \$18.00	\$ 0				
Independent claims	3 - 3 =	0	x \$80.00	\$ 0				
MULTIPLE DEPENDENT CLAIM(S) (if applicable)			+ \$270.00	\$				
<b>TOTAL OF ABOVE CALCULATIONS =</b>				\$ 860.00				
<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by 1/2.				\$				
<b>SUBTOTAL =</b>				\$ 860.00				
Processing fee of \$130.00 for furnishing the English translation later than <input type="checkbox"/> 20 <input type="checkbox"/> 30 months from the earliest claimed priority date (37 CFR 1.492(f)).				\$				
<b>TOTAL NATIONAL FEE =</b>				\$ 860.00				
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property +				\$				
<b>TOTAL FEES ENCLOSED =</b>				\$				
				<b>Amount to be refunded:</b>	\$			
				<b>charged:</b>	\$ 860.00			

a. ☐ A check in the amount of \$ \_\_\_\_\_ to cover the above fees is enclosed.

b. ☒ Please charge my Deposit Account No. 14-1263 in the amount of \$ 860.00 to cover the above fees.  
 A duplicate copy of this sheet is enclosed.

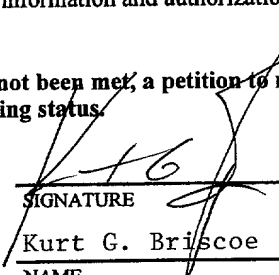
c. ☒ The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any  
 overpayment to Deposit Account No. 14-1263. A duplicate copy of this sheet is enclosed.

d. ☐ Fees are to be charged to a credit card. **WARNING:** Information on this form may become public. **Credit card  
 information should not be included on this form.** Provide credit card information and authorization on PTO-2038.

**NOTE:** Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR  
 1.137 (a) or (b)) must be filed and granted to restore the application to pending status.

SEND ALL CORRESPONDENCE TO:

Norris McLaughlin & Marcus PA  
 220 East 42nd Street  
 30th Floor  
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 (212) 808-0700

SIGNATURE   
 Kurt G. Briscoe  
 NAME  
33,141  
 REGISTRATION NUMBER

09/763106

JC02 Rec'd PCT/PTO 16 FEB 2001

Express Mail Label E1 728910875 US

Beiersdorf 713-KGB  
6713-Dr. Wi-ka

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANTS : Martin SUGÁR and Robert SCHMUCKER

SERIAL NO. : To Be Assigned

FILED : HEREWITH

FOR : USE OF DETERSIVE SUBSTANCES SELECTED FROM THE  
GROUP OF N-ACYLAMINO ACIDS AND THE SALTS OF N-  
ACYLAMINO ACIDS FOR ENHANCING THE  
COMPATIBILITY OF COSMETIC OR DERMATOLOGICAL  
CLEANSING PREPARATIONS

ART UNIT : To Be Assigned

EXAMINER : To Be Assigned

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February 16, 2001

Hon. Commissioner for Patents  
Washington, D.C. 20231

**PRELIMINARY AMENDMENT**

SIR:

Prior to examination, please amend the above-identified application as follows:

IN THE SPECIFICATION:

Insert as the first sentence: -- This application is a 371 of PCT/EP99/06113, which was  
filed on August 20, 1999. --

IN THE CLAIMS:

Claims 3 and 4, line 1 in each, delete "The use of" and substitute -- Method of using --.

Claims 5 and 6, line 1 in each, delete "use" and substitute -- method --.

Claim 5, line 1, delete "claim 3 or 4" and substitute --claim 3--

REMARKS

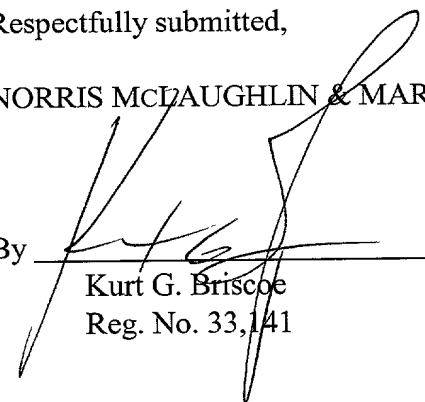
The amendments above amend the specification to include reference to the international application, and amend the claims to delete multiple dependencies.

Early and favorable action is earnestly solicited.

Respectfully submitted,

NORRIS McLAUGHLIN & MARCUS, P.A.

By

  
Kurt G. Briscoe  
Reg. No. 33,141

KGB:ja

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**Claims Pending as a Result of Preliminary Amendment Dated February 16, 2001**

1. A deterative cosmetic or dermatological preparation comprising:
  - (a) more than 9.0% by weight of lauryl ether sulfate,
  - (b) one or more anionic surfactants selected from the group of N-acylamino acids and their salts,
  - (c) less than 5.0% by weight of inorganic salts.
2. The deterative cosmetic or dermatological preparation as claimed in claim 1, comprising:
  - (b) more than 0.5% by weight, preferably more than 1.0% by weight, in particular more than 2.0% by weight, very particularly more than 3.0% by weight, of one or more anionic surfactants selected from the group of N-acylamino acids and their salts.
3. Method of using one or more anionic surfactants selected from the group of N-acylamino acids and their salts for preventing or reducing the attachment of lauryl ether sulfate to human skin during the washing process.
4. Method of using one or more anionic surfactants selected from the group of N-acylamino acids and their salts for desorbing lauryl ether sulfate from human skin.
5. The method as claimed in claim 3, wherein the surfactant or surfactants selected from the group of N-acylamino acids and their salts is or are present in deterative cosmetic or dermatological preparations at concentrations of more than 0.5% by weight, preferably more than 1.0% by weight, in particular more than 2.0% by weight, very particularly more than 3.0% by weight, based on the overall weight of the preparations.
6. The method as claimed in claim 3, wherein the sodium lauryl ether sulfate is present in deterative cosmetic or dermatological preparations at concentrations of more than 9.0% by weight, based on the overall weight of the preparations.

**Beiersdorf Aktiengesellschaft  
Hamburg**

**Description**

**Use of deterative substances selected from the group of N-acylamino acids and the salts of N-acylamino acids for enhancing the compatibility of cosmetic or dermatological cleansing preparations**

The present invention relates to the use of substances known per se as mild surfactants in cosmetic or dermatological cleansing compositions. The latter essentially comprise surface-active substances or mixtures of substances which are offered to the consumer in various preparations.

Examples of such preparations include foam baths and shower preparations, solid and liquid soaps or what are known as "syndets" (synthetic detergents), shampoos, handwashing pastes, personal hygiene compositions, special cleaning products for young children, and the like.

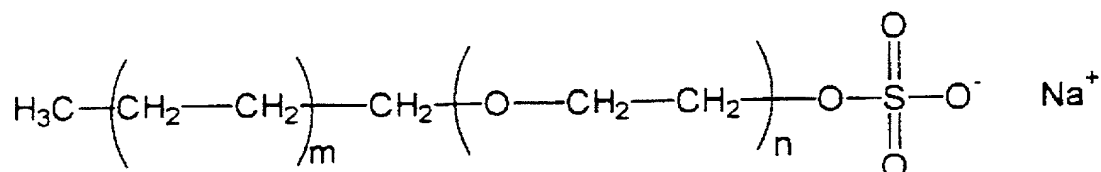
Surface-active substances – the best known being the alkali metal salts of the higher fatty acids, i.e., the classic "soaps" – are amphiphilic substances which are able to emulsify organic nonpolar substances in water.

These substances not only flush dirt from the skin and hair but also irritate skin and mucus membranes to a greater or lesser extent, depending on the choice of surfactant or surfactant mixture.

One of the surfactants used most commonly throughout the world for cosmetic compositions is sodium lauryl ether sulfate. Although per se an excellent deterative agent with good foaming ability, at higher concentrations it has an irritant effect on skin and mucous membranes.

As recent investigations show, the irritant potential of sodium lauryl ether sulfate is promoted at least in part by the fact that this substance binds to the surface of the skin, where it forms a certain reservoir. Studies suggest that the lauryl ether sulfate migrates from this reservoir into deeper layers of the skin, where it may then enter into uncontrolled secondary reactions, which harbor an increased risk of irritation.

The commercially customary sodium lauryl ether sulfate (i.e., sodium polyoxyethylene lauryl sulfate; by the INCI nomenclature: "sodium laureth sulfate"; CAS No. 1335-72-4), like the majority of raw materials used in cosmetics, is not a pure substance but rather, depending on its preparation, is a mixture of substances whose structures conform to the general formula



where n assumes numbers from 0 to 10 and m assumes numbers from 4 to 6. In the lauryl derivative which predominates in the commercial products and gives them their name, m is 5. Examples of commercial products are Texapon® N 25, Texapon® N 40, Texapon® N 70 and Texapon® N 103 from Henkel KGaA.

There are, however, also other lauryl ether sulfates having as their counterion, for example, ammonium ions unsubstituted or else substituted by alkyl groups or hydroxyalkyl groups, and also magnesium and the like.

Owing to its ready availability, acceptable price and excellent washing properties, however, it is impossible in practice, for the foreseeable future, to dispense entirely with sodium lauryl ether sulfate. Although preparations free from lauryl ether sulfate are known and are entirely advantageous, they nevertheless have other performance- or preparation-related or economic disadvantages.

It is known per se to use sodium lauryl ether sulfate in combination with other surfactants as a deterative agent. The skilled worker, wishing to enhance the skin compatibility of such preparations, then replaces some of the sodium lauryl ether sulfate with milder surfactants. However, unwanted side effects which generally have to be accepted are a reduction in foaming and/or in the cleansing performance. The aim was therefore to remedy this shortcoming.

The present invention relates, in one particular embodiment, to cleansing preparations for use as shower products.

Preparations of this kind as well are known per se. They essentially comprise surface-active substances or mixtures of substances, which are offered to the

consumer in various preparations. A general feature of such preparations is a more or less high water content, although they may also be present, for example, as concentrates.

Even simple bathing in water without the addition of surfactants is initially accompanied by swelling of the horny layer of the skin, the degree of said swelling being dependent, for example, on the duration of bathing and its temperature. At the same time, water-soluble substances, e.g., water-soluble dirt constituents, but also substances intrinsic to the skin, which are responsible for the water-binding capacity of the horny layer, are washed off or out. In addition, as a result of surface-active substances intrinsic to the skin, cutaneous fats are also dissolved and washed out to a certain extent. Following initial swelling, this causes subsequent significant drying of the skin, an effect which may be further intensified by deterative additives.

In the case of healthy skin, these processes are generally of no consequence, since the protective mechanisms of the skin are readily able to compensate for such slight disturbances to the upper layers of the skin. However, in the case even of nonpathological deviations from the normal state, e.g., as a result of environment-related wear damage or irritation, photo damage, aging skin, etc., the protective mechanism of the skin surface is impaired. In some circumstances, said mechanism is then no longer able to fulfill its function of itself, and has to be regenerated by means of external measures.

It was therefore an object of the present invention to remedy this deficiency in the prior art. A further object of the invention was to provide bath or shower preparations which on the one hand effect a high level of care without, on the other hand, leaving behind the cleansing effect.

The present invention additionally relates to deterative preparations of hair cosmetology, more commonly referred to as shampoos. In particular, the present invention relates to combinations of active cosmetic substances for the hair, and to haircare and scalp care preparations.

Surprisingly, all of these objects are achieved by means of deterative cosmetic or dermatological preparations comprising:

- (a) more than 9.0% by weight of lauryl ether sulfate,
- (b) one or more anionic surfactants selected from the group of N-acylamino acids and their salts,

- (c) less than 5.0% by weight of inorganic salts.

These objects are achieved in particular by means of deterative cosmetic or dermatological preparations comprising:

- (a) more than 9.0% by weight of lauryl ether sulfate,
- (b) more than 0.5% by weight, preferably more than 1.0% by weight, in particular more than 2.0% by weight, very particularly more than 3.0% by weight, of one or more anionic surfactants selected from the group of N-acylamino acids and their salts,
- (c) less than 5.0% by weight of inorganic salts.

The present invention further provides for the use of one or more anionic surfactants selected from the group of N-acylamino acids and their salts for preventing or reducing the attachment of lauryl ether sulfate to human skin during the washing process.

The present invention further provides for the use of one or more anionic surfactants selected from the group of N-acylamino acids and their salts for fully or partly desorbing lauryl ether sulfate from human skin.

The present invention further provides for the use of one or more surfactants selected from the group of N-acylamino acids and their salts, said surfactant or surfactants being present in deterative cosmetic or dermatological preparations at concentrations of more than 3.0% by weight, based on the overall weight of the formulations, for reducing the attachment of lauryl ether sulfate to human skin during the washing process or for removing lauryl ether sulfate from human skin.

The present invention further provides for the use of one or more anionic surfactants selected from the group of N-acylamino acids and their salts for reducing the attachment of lauryl ether sulfate to human skin during the washing process, especially when the sodium lauryl ether sulfate is present in deterative cosmetic or dermatological preparations at concentrations of more than 9.0% by weight, based on the overall weight of the preparations.

It is known per se that N-acylamino acids and their salts are mild surfactants with a useful foaming action and good washing action (H.P. Fiedler, Lexikon der Hilfsstoffe für Pharmazie, Kosmetik und angrenzende Gebiete, 4th edition, p. 108, entry "N-Acylglutaminsäure" [N-acylglutamic acid]).

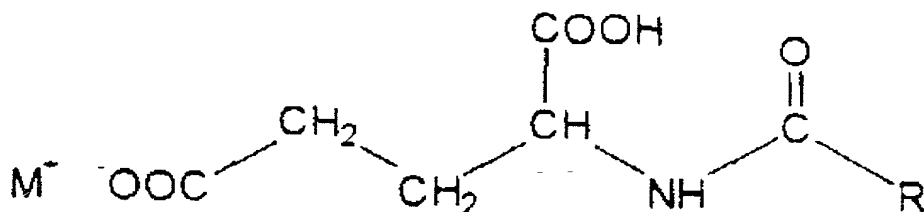
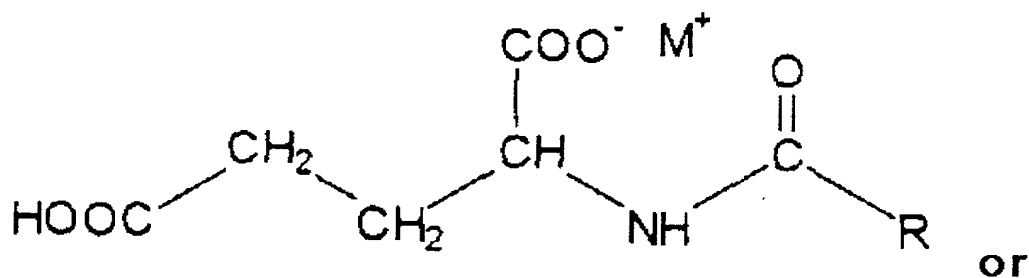
The document "Surface Active N-Acylglutamate: Preparation of Long Chain N-Acylglutamic Acid" (M. Takehara, I. Yoshimura, K. Takizawa, R. Yoshida; Journal of the American Oil Chemists' Society, vol. 49, p. 157 ff.) cites the JP patent 29 444 (1964), according to which acylglutamates have a moderating effect on instances of skin irritation brought about by other anionic surfactants such as sodium alkylbenzenesulfonates and sodium lauryl sulfate.

DE-A 43 04 066 describes a preparation comprising 12% by weight sodium lauryl ether sulfate and 3% by weight sodium cocoylglutamate. That document, however, relates to the use of electrolytes to prevent the penetration of the surface-active substances present in the cleansers, and/or other substances present in these cleansers, into the outer layers of the skin – the abovementioned preparation also contains 8% by weight sodium chloride, to whose presence the skilled worker attributes the reduction in the irritation potential of the sodium lauryl ether sulfate.

The acylamino acids (including, for the purposes of the present disclosure, the acyl peptides) and/or their salts may be chosen advantageously from the group consisting of

1. acylglutamates, examples being sodium acylglutamate, di-TEA-palmitoylaspartate and sodium caprylyl/caprylglutamate,
2. acyl peptides, examples being palmitoyl-hydrolyzed milk protein, sodium cocoyl-hydrolyzed soya protein and sodium/potassium cocoyl-hydrolyzed collagen,
3. sarcosinates, examples being myristoylsarcosine, TEA lauroylsarcosinate, sodium lauroylsarcosinate and sodium cocoylsarcosinate,
4. taurates, examples being sodium lauroyltaurate and sodium methylcocoyltaurate,
5. acyllysines, an example being lauroyllysine,
6. acylalaninates
7. acylglycinates

In the context of the present invention it is particularly advantageous to use acylglutamic acid and acylglutamates as the acylamino acid and/or salts thereof, respectively, especially sodium acylglutamates, which are characterized by the following structures:



or

Among the sodium acylglutamates, in turn, sodium cocoylglutamate, sodium lauroylglutamate, sodium myristoylglutamate, sodium stearylglutamate and sodium tallowylglutamate have proven particularly advantageous.

In accordance with the invention, and besides the abovementioned surfactants, the compositions may comprise the additives customary in cosmetology, examples being fragrance, dyes, antimicrobial substances, refatting agents, complexing agents and sequesterants, pearl luster agents, plant extracts, vitamins, active substances, preservatives, bactericides, pigments having a coloring action, thickeners, emollients, moisturizers and/or humectants, fats, oils, waxes or other customary constituents of a cosmetic or dermatological formulation, such as alcohols, polyols, polymers, foam stabilizers, electrolytes, organic solvents or silicone derivatives.

The examples which follow are intended to illustrate the present invention without restricting it. Unless stated otherwise, all amounts, proportions and percentages are by weight, based on the weight and the total amount, or on the total weight, of the preparations.

### Example 1

	% by weight
Sodium laureth sulfate (27.5% strength solution)	48.00
Cocoamidopropylbetaine (33% strength solution)	5.00
Sodium cocoylglutamate (25% strength solution)	5.00

PEG-40 hydrogenated castor oil	0.50
PEG-100 hydrogenated glyceryl palmitate	0.50
Sodium benzoate	0.45
Sodium salicylate	0.20
Citric acid	0.50
Perfume	q.s.
Water	ad 100.00

### **Example 2**

	% by weight
Sodium laureth sulfate (27.5% strength solution)	40.00
Cocoamidopropylbetaine (33% strength solution)	10.00
Sodium cocoylglutamate (25% strength solution)	3.00
PEG-40 hydrogenated castor oil	0.50
PEG-100 hydrogenated glyceryl palmitate	0.50
Sodium benzoate	0.45
Sodium salicylate	0.20
Citric acid	0.50
Perfume	q.s.
Water	ad 100.00

### **Example 3**

	% by weight
Sodium laureth sulfate (27.5% strength solution)	30.00
Cocoamidopropylbetaine (33% strength solution)	15.00
Sodium cocoylglutamate (25% strength solution)	1.00
PEG-40 hydrogenated castor oil	0.50
PEG-100 hydrogenated glyceryl palmitate	0.50
Sodium benzoate	0.45
Sodium salicylate	0.20
Citric acid	0.50
Perfume	q.s.
Water	ad 100.00

### **Example 4**

	% by weight
Sodium laureth sulfate (27.5% strength solution)	43.00
Cocoamidopropylbetaine (33% strength solution)	11.00

Sodium cocoylglutamate (25% strength solution)	4.50
Decyl glucoside (50% strength solution)	2.00
PEG-40 hydrogenated castor oil	0.50
PEG-100 hydrogenated glyceryl palmitate	0.50
Sodium benzoate	0.45
Sodium salicylate	0.20
Citric acid	0.50
Perfume	q.s.
Water	ad 100.00

#### **Example 5**

	% by weight
Sodium laureth sulfate (27.5% strength solution)	35.00
Cocoamidopropylbetaine (33% strength solution)	8.00
Sodium cocoylglutamate (25% strength solution)	3.00
Decyl glucoside (50% strength solution)	4.00
PEG-40 hydrogenated castor oil	0.50
PEG-100 hydrogenated glyceryl palmitate	0.50
Sodium benzoate	0.45
Sodium salicylate	0.20
Citric acid	0.50
Perfume	q.s.
Water	ad 100.00

#### **Example 6**

	% by weight
Sodium laureth sulfate (27.5% strength solution)	25.00
Cocoamidopropylbetaine (33% strength solution)	14.00
Sodium cocoylglutamate (25% strength solution)	2.00
Decyl glucoside (50% strength solution)	3.00
PEG-40 hydrogenated castor oil	0.50
PEG-100 hydrogenated glyceryl palmitate	0.50
Sodium benzoate	0.45
Sodium salicylate	0.20
Citric acid	0.50
Perfume	q.s.
Water	ad 100.00

**Example 7**

	% by weight
Sodium laureth sulfate (27.5% strength solution)	47.00
Sodium cocoamphoacetate (36% strength solution)	9.00
Sodium cocoylglutamate (25% strength solution)	6.00
PEG-40 hydrogenated castor oil	0.50
PEG-100 hydrogenated glyceryl palmitate	0.50
Sodium benzoate	0.45
Sodium salicylate	0.20
Citric acid	0.50
Perfume	q.s.
Water	ad 100.00

**Example 8**

	% by weight
Sodium laureth sulfate (27.5% strength solution)	41.00
Sodium cocoamphoacetate (36% strength solution)	6.50
Sodium cocoylglutamate (25% strength solution)	3.50
PEG-40 hydrogenated castor oil	0.50
PEG-100 hydrogenated glyceryl palmitate	0.50
Sodium benzoate	0.45
Sodium salicylate	0.20
Citric acid	0.50
Perfume	q.s.
Water	ad 100.00

**Example 9**

	% by weight
Sodium laureth sulfate (27.5% strength solution)	41.00
Sodium cocoamphoacetate (36% strength solution)	6.50
Sodium lauroylglutamate (25% strength solution)	3.50
PEG-40 hydrogenated castor oil	0.50
PEG-100 hydrogenated glyceryl palmitate	0.50
Sodium benzoate	0.45
Sodium salicylate	0.20
Citric acid	0.50
Perfume	q.s.
Water	ad 100.00

**Example 10**

	% by weight
Sodium laureth sulfate (27.5% strength solution)	32.00
Sodium cocoamphoacetate (36% strength solution)	5.00
Sodium cocoylglutamate (25% strength solution)	5.00
PEG-40 hydrogenated castor oil	0.50
PEG-100 hydrogenated glyceryl palmitate	0.50
Sodium benzoate	0.45
Sodium salicylate	0.20
Citric acid	0.50
Perfume	q.s.
Water	ad 100.00

**What is claimed is:**

1. A deterative cosmetic or dermatological preparation comprising:
  - (a) more than 9.0% by weight of lauryl ether sulfate,
  - (b) one or more anionic surfactants selected from the group of N-acylamino acids and their salts,
  - (c) less than 5.0% by weight of inorganic salts.
2. The deterative cosmetic or dermatological preparation as claimed in claim 1, comprising:
  - (b) more than 0.5% by weight, preferably more than 1.0% by weight, in particular more than 2.0% by weight, very particularly more than 3.0% by weight, of one or more anionic surfactants selected from the group of N-acylamino acids and their salts.
3. The use of one or more anionic surfactants selected from the group of N-acylamino acids and their salts for preventing or reducing the attachment of lauryl ether sulfate to human skin during the washing process.
4. The use of one or more anionic surfactants selected from the group of N-acylamino acids and their salts for desorbing lauryl ether sulfate from human skin.
5. The use as claimed in claim 3 or 4, wherein the surfactant or surfactants selected from the group of N-acylamino acids and their salts is or are present in deterative cosmetic or dermatological preparations at concentrations of more than 0.5% by weight, preferably more than 1.0% by weight, in particular more than 2.0% by weight, very particularly more than 3.0% by weight, based on the overall weight of the preparations.
6. The use as claimed in claim 3, wherein the sodium lauryl ether sulfate is present in deterative cosmetic or dermatological preparations at concentrations of more than 9.0% by weight, based on the overall weight of the preparations.

## **Abstract**

Detersive cosmetic or dermatological preparations comprise:

- (a) more than 9.0% by weight of lauryl ether sulfate,
- (b) one or more anionic surfactants selected from the group of N-acylamino acids and their salts,
- (c) less than 5.0% by weight of inorganic salts.

# PCT

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<b>(51) International patent classification<sup>7</sup>:</b>  C11D 1/37, A61K 7/50 // C11D 1/10, 1/29	<b>A1</b>	<b>(11) International publication number:</b> WO 00/11124  <b>(43) International publication date:</b> 2 March 2000 (02.03.00)
<b>(21) International application number:</b> PCT/EP99/06113  <b>(22) International filing date:</b> 20 August 1999 (20.08.99)  <b>(30) Data relating to the priority:</b> 198 38 034.8 21 August 1998 (21.08.98) DE  <b>(71) Applicant (for all designated States except US):</b> BEIERSDORF AG [DE/DE]; Unnastrasse 48, D-20245 Hamburg (DE).  <b>(72) Inventors; and</b> <b>(73) Inventors/Applicants (US only):</b> SUGAR, Martin [DE/DE]; Methfesselstrasse 88, D-20255 Hamburg (DE). SCHMUCKER, Robert [DE/DE]; Holsteiner Chaussee 154 A, D-22523 Hamburg (DE).  <b>(74) Joint Representative:</b> BEIERSDORF AG; Unnastrasse 48, D-20245 Hamburg (DE).		<b>(81) Designated states:</b> JP, US, European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).  <b>Published</b> With the International Search Report.
<b>(54) Title:</b> COSMETIC OR DERMATOLOGICAL PREPARATIONS CONTAINING N-ACYLAMINO ACIDS OR THEIR SALTS <b>(54) Bezeichnung:</b> KOSMETISCHE ODER DERMATOLOGISCHE ZUBEREITUNGEN ENTHALTEND N-ACYLAMINOSÄUREN ODER DEREN SALZE  <b>(57) Abstract</b>  The invention relates to surface-active detergent cosmetic or dermatological preparations containing the following: (a) more than 9.0 wt. % lauryl ether sulphate, (b) one or more anionic tensides, chosen from the group of N-acylamino acids and their salts and (c) less than 5.0 wt. % inorganic salts.  <b>(57) Zusammenfassung</b>  Waschaktive kosmetische oder dermatologische Zubereitungen, enthaltend: (a) mehr als 9,0 Gew.-% Laurylethersulfat, (b) ein oder mehrere anionische Tenside, gewählt aus der Gruppe der N-Acyaminosäuren und deren Salze, (c) weniger als 5,0 Gew.-% an anorganischen Salzen.		

## COMBINATION DECLARATION & POWER OF ATTORNEY

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name,

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled „“  
the specification of which is attached hereto.

-OR-

was filed on \_\_\_\_\_ as

Application Serial No. \_\_\_\_\_ and was amended \_\_\_\_\_

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations §1.56(a).

I hereby claim foreign priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

Prior Foreign Application(s)

Priority Claimed

198 38 034.8  
(Number)

Germany  
(Country)

21.08.1998  
(Day/Month/Yr. Filed)

[X] yes [ ] no

\_\_\_\_\_  
(Number)

\_\_\_\_\_  
(Country)

\_\_\_\_\_  
(Day/Month/Yr. Filed)

[X] yes [ ] no

I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, §1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

PCT/EP99/06113  
(Application Serial No.)



20.08.1999  
(Filing Date)

pending  
(Status)  
(patented, pending, abandoned)

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punished by fine or imprisonment, or both under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

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